

CLEAN SET OF CLAIMS

1 ~~24.~~ (Twice amended) A method of detecting normal, benign hyperplastic, and cancerous prostate epithelial cells or a portion thereof in a biological sample comprising:

BS providing an antibody or antigen binding portion thereof which binds to an extracellular domain of prostate specific membrane antigen present as an integral membrane protein on a living cell, wherein the antibody or antigen binding portion thereof is bound to a label effective to permit detection of said cells or a portion thereof upon binding of the antibody or antigen binding portion thereof to said cells or a portion thereof;

contacting the biological sample with the antibody or antigen binding portion thereof having a label under conditions effective to permit binding of the antibody or antigen binding portion thereof to the extracellular domain of prostate specific membrane antigen of any of said cells or a portion thereof in the biological sample; and

detecting a presence of any of said cells or a portion thereof in the biological sample by detecting the label.

2 ~~26.~~ (Amended) A method according to claim ~~24~~¹, wherein the antibody or antigen binding portion thereof is internalized with the prostate specific membrane antigen.

3 ~~27.~~ (Amended) A method according to claim ~~24~~¹, wherein said contacting is carried out in a living mammal and comprises:

administering the antibody or antigen binding portion thereof to the mammal under conditions effective to permit binding of the antibody or antigen binding portion thereof to the

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extracellular domain of the prostate specific membrane antigen of any of said cells or a portion thereof in the biological sample.

28. A method according to claim 27, wherein the label is a short-range radiation emitter.

29. A method according to claim 27, wherein said detecting is carried out rectally.

30. A method according to claim 27, wherein the biological sample is the mammal's prostatic fossa.

31. A method according to claim 27, wherein said detecting is carried out after prostatectomy.

B7 8 ~~32~~ (Amended) A method according to claim ~~27~~³, wherein the antibody or antigen binding portion thereof is internalized with the prostate specific membrane antigen.

33. A method according to claim 27, wherein said administering is carried out orally, parenterally, subcutaneously, intravenously, intramuscularly, intraperitoneally, by intravascular instillation, by intracavitary or intravesical instillation, intraocularly, intraarterially, intralesionally, or by application to mucous membranes.

B8 10 ~~34~~ (Amended) A method according to claim ~~24~~¹, wherein said antibody is selected from the group consisting of a monoclonal antibody and a polyclonal antibody.

35. A method according to claim 34, wherein the antibody is selected from the group consisting of an E99, a J415, a J533, and a J591 monoclonal antibody.

36. A method according to claim 34, wherein the antibody is a monoclonal antibody produced by a hybridoma cell line having an ATCC Accession Number selected from the group consisting of HB-12101, HB-12109, HB-12127, and HB-12126.

13 ~~37~~ (Amended) A method according to claim 24, wherein an antigen binding portion of an antibody is used in carrying out said method, the binding portion being selected from the group consisting of an Fab fragment, an F(ab')₂ fragment, and an Fv fragment.

39. A method according to claim 24, wherein the label is selected from the group consisting of a fluorescent label, a radioactive label, a nuclear magnetic resonance active label, a luminescent label, and a chromophore label.

15 ~~40~~ (Amended) A method according to claim 24, wherein the antibody or antigen binding portion thereof is in a composition further comprising a physiologically acceptable carrier, excipient, or stabilizer.

16 ~~41~~ (Amended) A method according to claim 24, wherein the antibody or antigen binding portion thereof is in a composition further comprising a pharmaceutically acceptable carrier, excipient, or stabilizer.

42. A method according to claim 24, wherein said contacting is carried out in a sample of serum or urine.